

PETRI POWER ZOOM

PETRI Camera Company, Inc.

1. Umejima-machi, Adachi-ku, Tokyo, Japan
PETRI cameras are sold in major cities all over
the world.

Printed in Japan

PETRI[®]
POWER

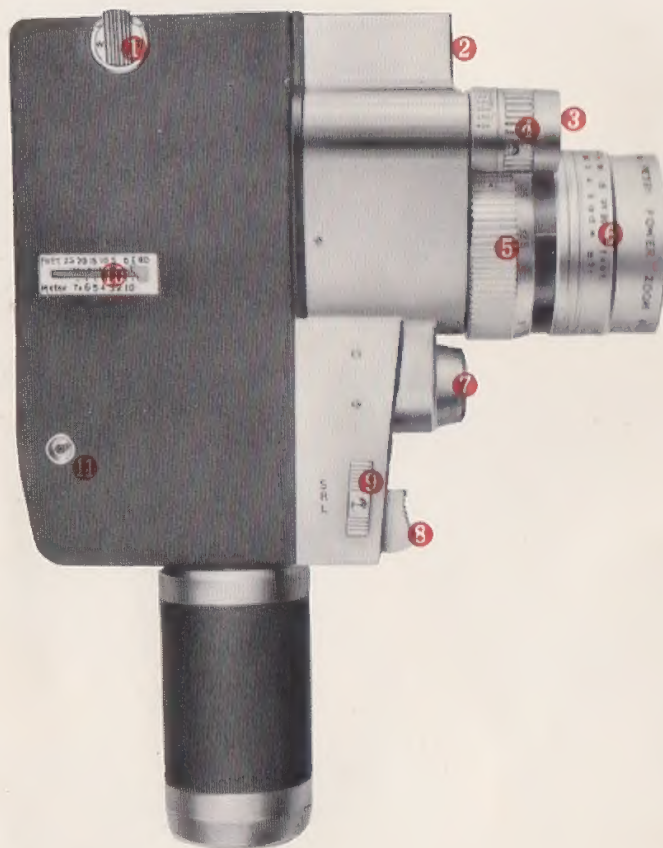
Z
OOM

INSTRUCTION BOOK

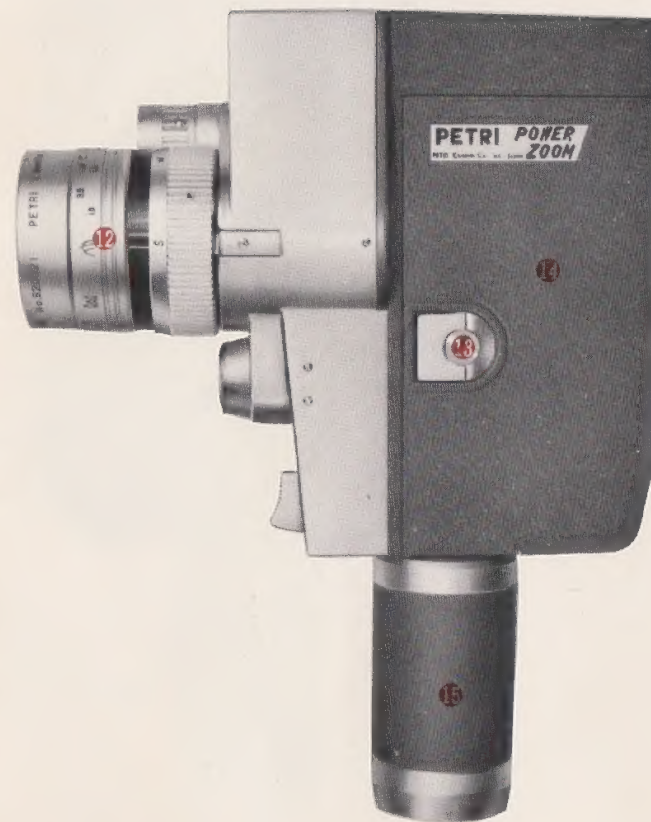


Sign of GOOD DESIGN

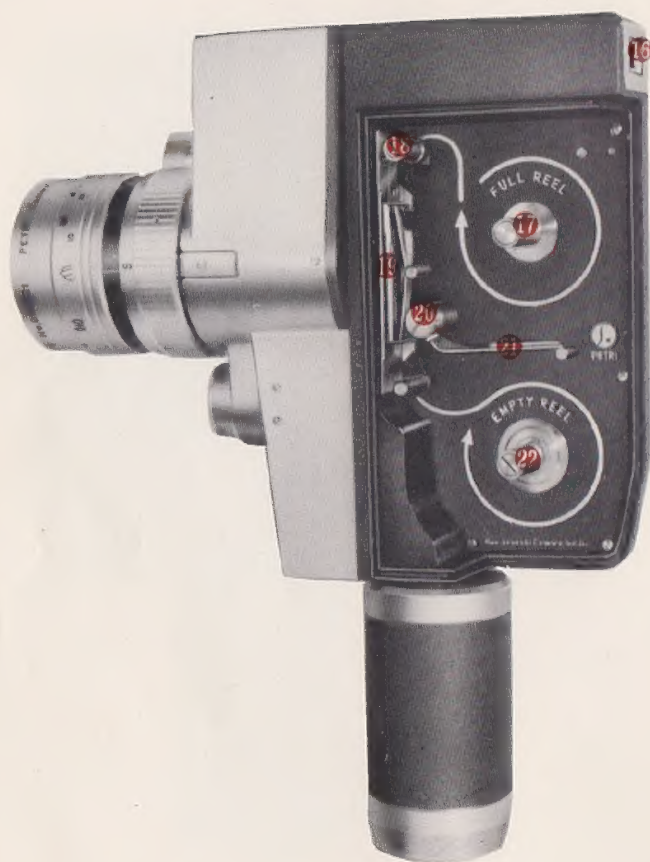
Description of Parts



- | | |
|-----------------|--------------------------|
| 1 Zoom Lever | 6 Distance Scale |
| 2 Viewfinder | 7 Mercury Battery |
| 3 CdS meter | 8 Shutter Release Button |
| 4 Film ASA Dial | 9 Lock Lever |
| 5 Zoom Dial | 10 Film Indicator |



- | |
|----------------------------------|
| 11 Remote Control Socket |
| 12 Distance Scale |
| 13 Side Cover Lock |
| 14 Side Cover |
| 15 Grip &/or Battery Compartment |



16 Eye-Piece
17 Film Spool Spindle
18 Film Guide Roller
19 Film Gate
20 Cover Lock Spindle

21 Film Counter Lever
22 Take-up Spool Spindle

Specification of PETRI POWER ZOOM

- Type** : Fully-automatic Electric-Eye
Zoom cine camera
- Lens** : PETRI 28mm f1.8 Power-zoom Lens, (10 groups 13 elements amber-coated).
Focal length 9mm to 28mm
- Shutter** : 16 frames per second.
Exposure-time 1/40 second.
- Viewfinder** : Reversal-Galileon-type
Zoomfinder, 0.4
magnification (9mm) and
1.13 magnification (28mm)
- Focusing** : Helicoid Focal-adjusting
system ; Distance Scale :
(in meter), 15,10,6,4,3,2.5,
2,1.5,1,2,1 ; (in feet), 50,25,
15,10,8,7,6,5,4,3.5
- Exposure Meter** : Cds-type fully-automatic
Electric-Eye system ; ASA
10-400, Mercurial Battery
MP-type, Exposure-range
visible in the finder.
- Others** : Cds Automatic-Exposure
system, Auto-zooming, 25
feet continuous shooting,
remote control system and
others.
- Size of Camera** : 161.5x143.5x57.5mm
- Accessories** : Remote Control Device
Filters & Battery Tester.



Superlative Features of PETRI POWER ZOOM

1. Built-in Power-Zoom Lens

Built-in Power-Zoom F1.8 Lens is super-fast with wide range of its focal length from 9mm to 28mm. So you can enjoy the versatility of movie-making with your own Petri Power-Zoom as if you possess various types of interchangeable lenses with different focal length. And also you can get zooming effects just by turning the Telephoto-Wide Angle Lever to switch from telephoto movie-making to wide-angle one and in reverse while having continuous shooting. AUTOMATICALLY.

2. Electric-Eye System with CdS Meter

Just aim your PETRI Power-Zoom toward the subject and press the shutter release button...and you can get proper exposure AUTOMATICALLY...EVERY TIME...with sensitive works of CdS Meter built-in. The needle visible in the viewfinder is to indicate the coupled-range of exposure-meter. When the subject is in extremely dark or bright zone and is out of coupled-range, the needle automatically points the red-marking to give you the warning.

3. BRIGHT and EASY Zoom-Finder

Your Petri Power-Zoom is also equipped with Zoom-Finder to change the subject visible in the viewfinder coupled with the Zoom-Lens continuously. As the finder is bright and easy to look

through, you can adjust the trimming while shooting.

4. Smooth Motor-Driving

With 4 pieces of penlite-battery (1.5 V each), the mechanism will be motor-driven with 6V battery. You do not need to wind the mechanism by hand.

5. Convenient Shutter Release Button

The shutter release button has been specially designed so as to push it with your index finger easily. By setting the lock in three ways, you can lock the shutter release button, stop the works of CdS meter and run the film continuously without pressing the button with your finger.

6. Film Exposure Counter

As the film exposure counter indicates the footage of un-exposed film (also in meter), you do not need to calculate the length of film remained un-exposed in your camera. The indication needle of counter resets automatically when you open and shut the side cover.

7. Distance-scale Ring with Zone-Focusing Marking

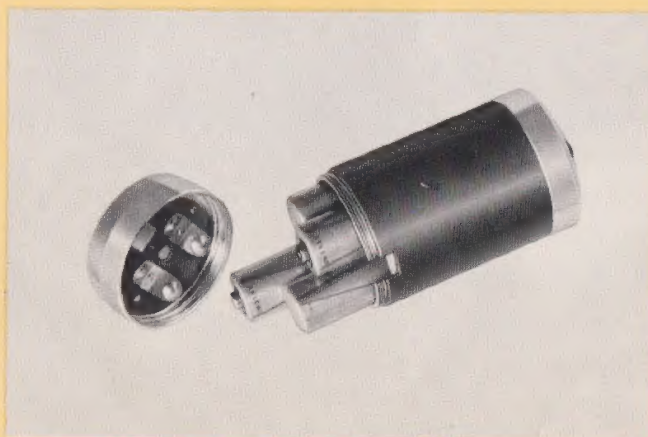
Beside the distance markings from 1m(3.5 ft) to infinity engraved on the ring, PETRI POWER ZOOM has on its ring three different distance markings for close (1.5m), middle(4m) and distant(∞) subjects. As such three distance scales can be set easily by click-stop system, you can enjoy your movie-making without confusion.

8. Portability

Though the zoom cine-cameras on the market today are not of portability, this PETRI Power-Zoom is very thin and light to carry it with you at all times.

BATTERY LOADING

PETRI POWER ZOOM is Electric Motor camera with 4 pieces of standard penlite batteries of 1.5V each (6V as a total). The grip of camera itself is battery compartment. Unscrew the cover of grip and place 4 pieces of penlite batteries as the instruction inside of compartment says. To screw the cover of the grip, just fit the raised part of cover with the dent parts of grip, and screw in. Before using PETRI POWER ZOOM attach the grip to the bottom of camera body by just screwing grip into the screw-hole of camera bottom-plate. With the new batteries, you can photograph continuously over 10 rolls of film. Replace the batteries in every 3 or 4 months even if you do not use the camera for the periods. In order to check the power output of batteries, specially designed Battery Tester is on sale.



FILM LOADING

- Before loading film, check if the inside of compartment is clean or not. Especially, film gate should be cleaned all the times. And the take-up spool should be handled carefully, because you have to use it for a long time. Note that the slight dent on spool surface greatly affects smooth film running.
- Avoid direct sunlight and select shadowy place for film loading.

1.

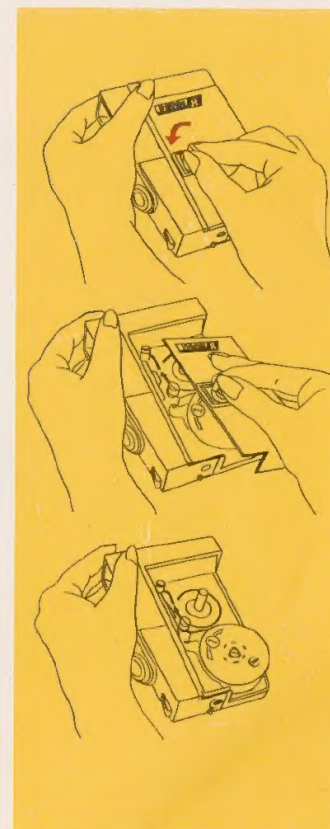
Lift up Side-Cover-Lock and turn it in the direction of arrow-marking.

2.

Pick Side-Cover-Lock and take Cover away.

3.

Remove Take-up Spool from film compartment.





4.

Break the seal of new film and insert the end of film into the slot of Take-up Spool spindle with Emulsion side of film inwardly. Be sure that 3-holes side on Take-up Spool and 4-holes side of Film Spool facing upward.

5.

Hold Take-up Spool with left hand and Film Spool with right hand and stretch film with both index fingers. Note that the darker color side of film facing outside.

6.

Insert film into Film-gate making film to follow guide-line indicating inside of compartment. And place both spools to Film Rollers.

7.

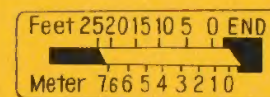
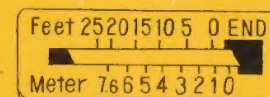
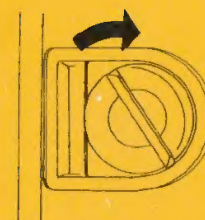
Close Side-cover and turn Side-Cover-Lock to the right (arrow-marking) and place lock to original position.

8.

At this moment, film exposure indicator shows this position.

9.

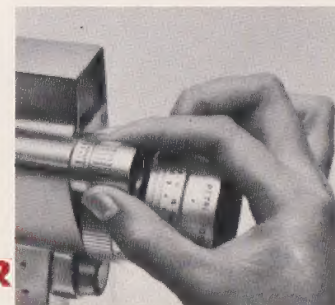
Push Shutter Release Button until indicator shows 25 feet (7.6 meter). Film-loading was completely done.



SETTING

ASA

INDICATOR



After loading the film, set the indication marking (Red dot) on the ASA Indicator located upper front of camera-body to the ASA number of film in use.

ADVANTAGES OF "ELECTRIC-EYE" SYSTEM

The most remarkable advantage of ELECTRIC -EYE SYSTEM equipped with PETRI POWER ZOOM is that you can get Proper Exposure automatically whenever you shift your PETRI POWER ZOOM toward subject without making complicated exposure setting by yourself. In this way, even the beginner who is not familiar with exposure setting can get proper exposure at all times by just setting both ASA Ring to Film ASA in use and Auto-Manual Switch Dial to the Marking, "AUTO". PETRI POWER ZOOM itself adjust exposure automatically FOR YOU as you pan your PETRI POWER ZOOM from bright-subject to dark-subject or in vice versa.

In order to find out whether ELECTRIC-EYE SYSTEM is in effect or not, or if the subject is in shooting area or not, just watch the sway of meter-needle visible at the bottom-part of view-finder. As the subject becomes brighter, the needle swing to the right and it swings to the left as subject becomes darker. But the exposure is always proper until needle swings to the marking, "Too Bright", which means subject is over-exposed with the minimum-aperture of camera. So if you want to keep

shooting in the same condition, you have to use NDX 4 Filter to adjust exposure multiple. As needle swings to the marking, "Too Dark", subject becomes too dark with the lens of camera remains widely open. You have to consider the countermeasure such as switching photography to Flood-lamp Picture Taking and some other ways.



Over-exposure



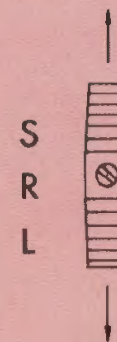
Under-exposure

HOW TO USE SHUTTER BUTTON

1. As you set the lock at the marking, "S", shutter release button will be locked and you can prevent unnecessary running of film. And also it can eliminate the works of Cds Meter simultaneously.
2. When photographing, set the lock to the marking, "R".
3. While pressing the shutter release button, set the lock to the marking, "L", and you can run the film without pressing the shutter release button for continuous shooting.

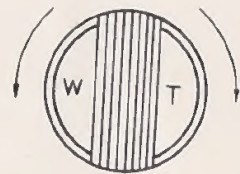
As you stop shooting set the lock to the "R" marking in the middle.

Set the shutter button to "S" marking when not using your camera.



HOW TO USE ZOOM-LENS

While looking through the viewfinder, turn the Zoom-ring, then the area of vision in the viewfinder varies. You can photograph the area exactly same as you see in the viewfinder. When it is in its maximum-multiple, the focal length of lens is 28mm and when minimum multiple, it is 9mm. At every focal length, you can photograph the subject accurately. When zooming while your photographing the subject, push down the ZOOM-LEVER located on the top of camera-body. In changing from telephoto to wide angle, push the lever down to the marking, "W" and for telephoto zooming push it to the marking, "T". By just doing this, you can change the focal distance automatically and continuously.



for WIDE ANGLE

for TELE-PHOTO

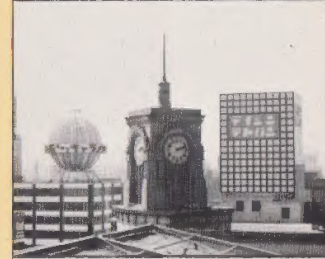
HOW TO FOCUS

As you aim the camera toward the subject, turn the focus ring to set the distance scale to the indication (white-line) on the lens rim. Or usually it can be set by setting the white line on the opposite side of lens rim to the pictures. The single human pictures is for 1.5m, group pictures for 4m and mountain for infinity. (Zone-focusing System)

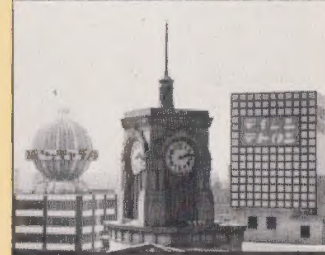
9 mm



12.5 mm



15 mm



20 mm



28 mm





HOW TO HOLD PETRI POWER ZOOM

Holding your PETRI POWER ZOOM is one of the important points in taking Quality movie, for the slightest blurring of your camera greatly affects the results of picture-taking. Hold the top of camera with your left hand and the grip with your right hand. Stretch your right index-finger to reach the shutter release button. To make your camera-holding stabilize touch your side with your right elbow and put camera-back to a part of your face. Press shutter release button with your right index-finger in a smooth and steady motion.

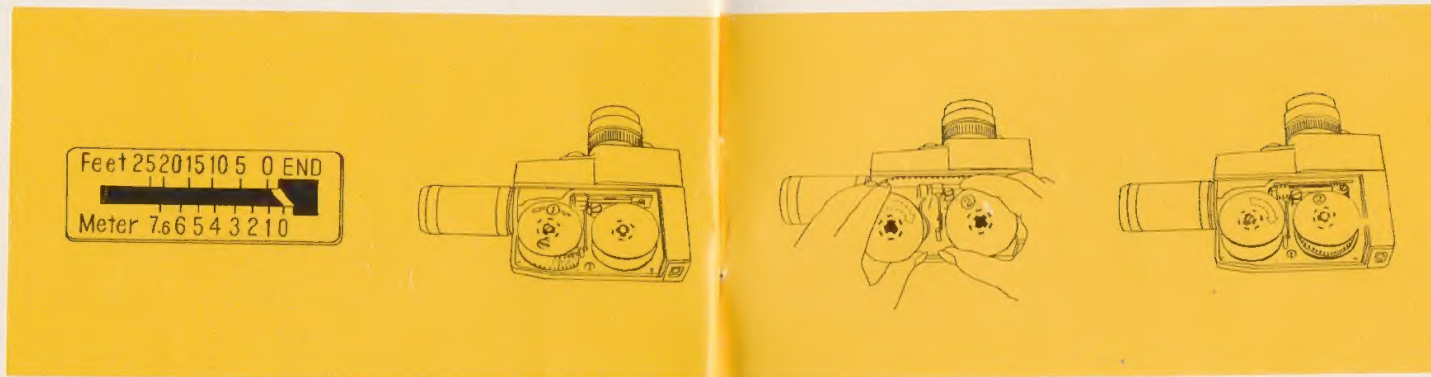
As PETRI POWER ZOOM is light, you can photograph while holding the grip with your right hand alone. But try to hold it with your both hands as mentioned above except the one-hand photographing is extremely needed. To give more stabilization to your picture taking, use tripod with your PETRI POWER ZOOM.

As the focal length becomes longer, the stabilization of camera becomes much more important. So be careful when you use Telephoto lens to avoid blurring of camera.

The beginners are apt to move camera to and fro recklessly while photographing, but keep in your mind the fact that continuous panning of camera tires the eyes of audience of movie when it is in projection.

Try to avoid panning your camera and move yourself from one place to another to photograph different places accurately. When you have to pan your camera, move it very slowly while giving utmost care to avoid blurring it. This is the reason why stabilized camera-holding is essential.

CHANGING AND UNLOADING FILM



1.

As you run film and when the indicator shows the marking, "O" (zero), you have to stop shooting and run the remaining film until indicator shows END-marking

2.

Keep running film until Take-up Spool completely winds up the film. Note the sound of winding film. When Take-up spool finished winding, sound becomes very weak. Remove side cover and take both spools out of compartment.

3.

Then turn over both spools and replace left spool with right one. Following instruction of film loading, insert the end of film into slot of empty spool spindle and place them into compartment.

4.

Now 4-holes spool is on the right and 3-holes spool on the left, and both facing upward. Picture 4 shows when film-changing is completed.

■ As you take out film, be careful for getting film loose by pressing both sides of film. Before taking spool out of compartment, be sure that film is completely wound in the spool.

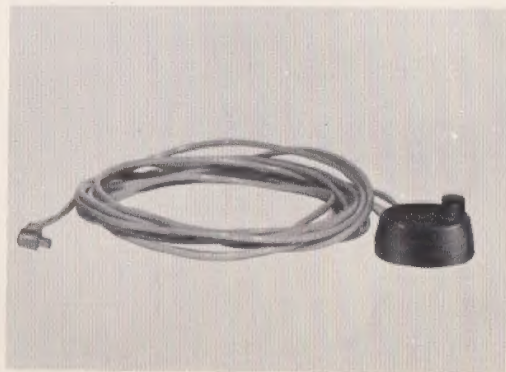
■ If the end of film is still in film-gate, turn spool with finger to wind up film into spool to the end. After exposed second-half of film, remove spool with film.

■ When you mail film to film manufacturer, they mail it back to you after developed it and cut film into the size of 8mm in the condition that you can project it without making any changing.



REMOTE CONTROL

Screw Remote Control Device into Grip and connect cord to Remote Control Socket located on the side of camera body. Then turn Lock Lever to the marking, "L" while pressing shutter release button. Remote Control Photography is now completely ready. Fix camera on tripod and press Remote Control button on battery case from distant place. You can control shutter as you wish without touching camera.



BATTERY TESTING

You can check battery very easily with Petri's unique Battery Tester. Touch Remote Control Socket with the plug of Battery Tester. Then the needle in Battery Tester sways to show you how much voltage is left. Batteries should be changed if the needle shows the shortage. In order to avoid considerable drain on batteries, unnecessary testing should not be made.

For photographing the bright subjects, NDX4 filter is indispensable.

Though the diaphragm of PETRI POWER ZOOM can be adjusted automatically, in your photographing extremely bright subjects seen in the Summer beach and skiing in Winter, for instance, you usually get over-exposed movie even with the smallest aperture. This is why movie-makers say that the NDX4 filter is indispensable. You have no difficulties at all to shoot the bright subjects when using the NDX4 filter.

FILTERS for PETRI POWER ZOOM

For Black & White Picture:

Y1, Y2 (Yellow) For outdoor human and landscape.

YA3 (Orange) For landscape in a long distance.

R1 (Red) For getting strong contrast.

UV (Colorless) Absorb ultra-violet rays.

NDX4 (Medium) For sunny subjects.

For Color Picture:

W4 (for Bluish subject), **C4** (2 hours before and after Sunset)

C12 (for Flood Lamp Photography) **1A** (for haze-cutting effect).

85 C (to convert all type-A color film to daylight use)

CARE IN HANDLING PETRI POWER ZOOM

Clean up film-gate specially.

As mentioned before, you have to keep clean inside of compartment, because dust caught in film-gate sometimes causes scratch on film surface. Use soft-brush to clean film-gate.

Care for Battery

It is recommendable for you to take batteries out of compartment while it is not in use.

Care for Storing Camera

Pay attention to keep your camera away from heat, moisture and dust. Though you do not need to oil your camera, it is advisable for you to go to Specialist for overhaul camera once in a while.



When replacing Mercury Battery, first unscrew the battery compartment and insert the new battery so as to put the marking (+) on the top.